[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-0244; Directorate Identifier 2014-NM-127-AD; Amendment

39-18313; AD 2015-22-08]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Airbus Model A318, A319, and A320 series airplanes. This AD was prompted by a cracked upper cardan in the main landing gear (MLG). This AD requires revising the maintenance or inspection program, as applicable, to reduce the life limits for the MLG upper cardan for certain installations. We are issuing this AD to prevent failure of the upper cardan in the MLG, which could result in MLG collapse and subsequent damage to the airplane and injury to occupants.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov/#!docketDetail;D=FAA-2015-0244; or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this AD, contact Airbus, Airworthiness Office – EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; Internet http://www.airbus.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0244.

FOR FURTHER INFORMATION CONTACT: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149.

Discussion

SUPPLEMENTARY INFORMATION:

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus Model A318, A319, and A320 series airplanes. The NPRM published in the <u>Federal Register</u> on March 5, 2015 (80 FR 11964).

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2014-0141, dated June 4, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all Airbus Model A318, A319, and A320 series airplanes. The MCAI states:

During an A320-200 77T main landing gear (MLG) fatigue test by Messier Bugatti-Dowty (MBD), an upper cardan was found with a crack, emanating from the grease hole / main lug intersection. The affected upper cardan, Part Number (P/N) 201163620, is listed in the applicable Airworthiness Limitations Section (ALS) Part 1 with a demonstrated fatigue life of 60,000 landings.

This condition, if not corrected, could lead to MLG upper cardan failure, possibly resulting in MLG collapse and subsequent damage to the aeroplane and injury to occupants.

Prompted by these findings and further to analysis, it has been decided to reduce the life limit for certain installations of the P/N 201163620 MLG upper cardan.

For the reasons described above, this AD requires implementation of the new life limits, as applicable, and replacement of any affected MLG upper cardan units that have already exceeded the reduced limit.

The reduced life limits for the affected MLG upper cardan are expected to be incorporated in a next revision of the Airbus A318/A319/A320/A321 ALS Part 1.

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2015-0244-0003.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM (80 FR 11964, March 5, 2015) and the FAA's response to each comment.

Request to Extend the Compliance Time

Delta Airlines (DAL) requested that paragraph (g) of the proposed AD (80 FR 11964, March 5, 2015) be revised so the initial compliance time for replacing the MLG upper cardan is extended and corresponds to that of European Aviation Safety Agency (EASA) AD 2014-0141, dated June 4, 2014. EASA AD 2014-0141 specifies an initial compliance time of "within 3 months" after the effective date of that EASA AD and the proposed AD specified an initial compliance time of prior to the applicable life limit specified in paragraphs (g)(1) through (g)(5), or within 30 days after the effective date of the AD, whichever occurs later.

We agree with the commenter's request. In consideration of the average utilization rate of affected U.S. operators, the practical aspects of an orderly modification of the U.S. fleet during regular maintenance periods, and the availability of required modification parts, we have determined that a 3 month initial compliance time is appropriate for replacing the MLG upper cardan. We have changed paragraph (g) of this AD accordingly.

Request to Reference Next Higher Part Number Assembly

Lufthansa Technik requested that the part number for the next higher assembly of MLG cardan part number (P/N) 201163620 be referenced in the NPRM (80 FR 11964,

March 5, 2015). The commenter stated that the NPRM and corresponding EASA AD 2014-0141, dated June 4, 2014, reference P/N 201163620, but that part number is not identified in the aircraft illustrated parts catalog (AIPC). The commenter is concerned that if operators only look in the AIPC to see if P/N 201163620 is identified, and it is not there, they may falsely think that their airplanes would not be affected by the NPRM.

We do not agree with the commenter's request. Although MLG cardan P/N 201163620 is not included in the AIPC, it is identified in Airbus A318/A319/A320/A321 ALS Part 1 - Safe Life Airworthiness Limitation Items, which is part of the approved type design for these airplanes. Therefore, we have not changed this AD in this regard.

Clarification of Parts Installation Limitation

In paragraph (j) of the proposed AD (NPRM (80 FR 11964, March 5, 2015), we referred to applicable life limits in paragraphs (g)(1) through (g)(5) of the proposed AD. For airplanes other than those identified paragraphs (g)(1) through (g)(5) of the proposed AD, the life limit is in Airbus A318/A319/A320/A321 ALS Part 1 - Safe Life Airworthiness Limitation, Revision 02, dated May 13, 2011, as specified in paragraph (h)(5) of this AD. In addition, if a part is transferred between airplanes, operators must adjust the life limit using the method specified in Airbus A318/A319/A320/A321 ALS Part 1 - Safe Life Airworthiness Limitation, Revision 02, dated May 13, 2011, as specified in paragraph (h)(3) of this AD. We have clarified paragraph (j) of this AD by also referring to paragraphs (h)(3) and (h)(5) of this AD.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (80 FR 11964,
 March 5, 2015) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (80 FR 11964, March 5, 2015).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information under 1 CFR part 51

Airbus has issued A318/A319/A320/A321 ALS Part 1 - Safe Life Airworthiness Limitation Items, Revision 02, dated May 13, 2011. This document provides revised instructions and life limits for airworthiness limitations items. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this AD.

Costs of Compliance

We estimate that this AD affects 851 airplanes of U.S. registry.

We also estimate that it will take about 1 work-hour per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$0 per product. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$72,335, or \$85 per product.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;

2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov/#!docketDetail;D=FAA-2015-0244; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2015-22-08 Airbus: Amendment 39-18313. Docket No. FAA-2015-0244; Directorate Identifier 2014-NM-127-AD.

(a) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

For airplanes with configurations specified in paragraphs (g)(1) through (g)(5) of this AD: Paragraph (g) of this AD terminates the life limit specified in paragraph (n)(1) of AD 2014-23-15, Amendment 39-18031 (80 FR 3871, January 26, 2015), for airplanes having a main landing gear (MLG) upper cardan part number (P/N) 201163620.

(c) Applicability

This AD applies to the Airbus airplanes identified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, certificated in any category, all manufacturer serial numbers.

- (1) Model A318-111, -112, -121, and -122 airplanes.
- (2) Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.
- (3) Model A320-211, -212, -214, -231, -232, and -233 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing Gear.

(e) Reason

This AD was prompted by a cracked upper cardan in the main landing gear (MLG). We are issuing this AD to prevent failure of the upper cardan in the MLG, which could result in MLG collapse and subsequent damage to the airplane and injury to occupants.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Revision to Maintenance or Inspection Program

For airplanes having a MLG upper cardan part number (P/N) 201163620: Within 30 days after the effective date of this AD, revise the maintenance or inspection program, as applicable, to incorporate the applicable life limits for the MLG upper cardan P/N 201163620 specified in paragraphs (g)(1) through (g)(5) of this AD and the life limit clarifications specified in paragraph (h) of this AD. The initial compliance time for replacing the MLG upper cardan is prior to the applicable life limit specified in paragraphs (g)(1) through (g)(5) of this AD, or within 3 months after the effective date of this AD, whichever occurs later. Accomplishing this revision terminates the life limit required by paragraph (n)(1) of AD 2014-23-15, Amendment 39-18031 (80 FR 3871, January 26, 2015), for the MLG upper cardan P/N 201163620 for that airplane only.

(1) For Airbus Model A319 series airplanes, pre-Airbus Modification 26644, excluding corporate jets post-Airbus Modification 28238, 28162, and 28342: The life limit is 50,590 total flight cycles.

- (2) For Airbus Model A319 series airplanes, post-Airbus Modification 26644, excluding corporate jets post-Airbus Modification 28238, 28162, and 28342: The life limit is 56,480 total flight cycles.
- (3) For Airbus Model A320 series airplanes pre-Airbus Modification 26644 having weight variant (WV) WV011, WV012, WV016, or WV018: The life limit is 50,590 total flight cycles.
- (4) For Airbus Model A320 series airplanes post-Airbus Modification 26644, having WV011, WV012, WV016, or WV018: The life limit is 56,480 total flight cycles.
- (5) For Airbus Model A320 series airplanes post-Airbus Modification 26644, having WV015 or WV017: The life limit is 42,140 total flight cycles.

(h) Additional Life Limit Clarifications

- (1) The life limits specified in paragraphs (g)(1) through (g)(5) of this AD are total flight cycles accumulated by the MLG since first installation on an airplane.
- (2) The life limits specified in paragraphs (g)(1) through (g)(5) of this AD are applicable only for the airplane model, configuration and WV specified in those paragraphs.
- (3) If a part is transferred between airplanes having a different life limit for the MLG unit, adjust the life limit using the method specified in Airbus A318/A319/A320/A321 ALS Part 1 Safe Life Airworthiness Limitation Items, Revision 02, dated May 13, 2011.

Note 1 to paragraphs (h)(3) and (h)(5) of this AD: Airbus A318/A319/A320/A321 ALS Part 1 - Safe Life Airworthiness Limitation Items, Revision 02, dated May 13, 2011,

is already required by paragraph (n) of AD 2014-23-15, Amendment 39-18031 (80 FR 3871, January 26, 2015).

- (4) A MLG unit on which Airbus Modification 26644 is installed is also known as "enhanced" landing gear and is identified as P/N 201582xxx Leg and Dressing Series. A MLG unit that does not have Airbus Modification 26644 installed is identified as P/N 201375xxx Leg and Dressing Series. (The xxx designation is a placeholder for numbers).
- (5) For airplanes with configurations not specified in paragraphs (g)(1) through (g)(5) of this AD, the life limit for the MLG unit is specified in Airbus A318/A319/A320/A321 ALS Part 1 Safe Life Airworthiness Limitation Items, Revision 02, dated May 13, 2011.

(i) No Alternative Actions and Intervals

After the maintenance or inspection program, as applicable, has been revised as required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (k)(1) of this AD.

(j) Parts Installation Limitation

As of the effective date of this AD, a MLG upper cardan having P/N 201163620 may be installed on an airplane, provided the part life has not exceeded the applicable life limit specified in paragraphs (g)(1) through (g)(5) of this AD, paragraph (h)(3) of this AD, and paragraph (h)(5) of this AD, and is replaced with a serviceable part prior to

exceeding the applicable life limit specified in paragraphs (g)(1) through (g)(5) of this AD, paragraph (h)(3) of this AD, and paragraph (h)(5) of this AD.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(I) Related Information

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2014-0141, dated June 4, 2014, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2015-0244.

(m) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.
- (i) Airbus A318/A319/A320/A321 ALS Part 1 Safe Life Airworthiness Limitation Items, Revision 02, dated May 13, 2011. The revision level of this document is identified on only the title page and in the Record of Revisions. The revision date is not identified on the title page of this document.
 - (ii) Reserved.
- (3) For service information identified in this AD, contact

 Airbus, Airworthiness Office EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac

 Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email

 account.airworth-eas@airbus.com; Internet http://www.airbus.com.

(4) You may view this service information at the FAA, Transport Airplane

Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of

this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the

National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on October 22, 2015.

Jeffrey E. Duven,

Manager,

Transport Airplane Directorate,

Aircraft Certification Service.

[FR Doc. 2015-27925 Filed: 11/4/2015 8:45 am; Publication Date: 11/5/2015]

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